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STRENGTHENING LAND RIGHTS AND FOOD SECURITY IN MALI

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ABSTRACT

The people of Mali are among the roughly 1 billion worldwide who suffer from food insecurity. In 2010, just over 50 percent of the country's population lived on less than $1.25 per day, and 27 percent of the children under five years of age were underweight. The causes of food security in Mali are intertwined, and include poverty, inadequate supply and political instability. Poverty is especially severe in rural areas, where 80 percent of the population is not earning enough money, or growing enough food, to meet their basic caloric needs on a consistent basis (USAID 2010). The country also suffers from a food supply deficit in terms of national production and trade, inadequate storage to reduce losses and insufficient transport to make food available where needed. Food security problems are compounded in Mali by political instability, which disrupts food distribution channels and cuts off access. The Malian military overthrew the democratically-elected government in March of 2012. Separatist and Islamic fundamentalist groups controlled the entire northern half of the country and continued their advance until the French military intervened in early 2013. From 2007 to 2012, the Millennium Challenge Corporation supported a major effort to address these causes of food security. The Government of Mali, with MCC financial and technical assistance, implemented the Alatona Irrigation Project in a remote area of the Ségou region of central Mali. The integrated agricultural development project prepared almost 5,000 hectares of irrigated land, allocated the land to farmers and provided them with startup inputs as well as agricultural and financial training. This article describes how key questions about the project's land allocation activity that relate to food security were addressed and implemented. Section I provides a short description of the project. Section II examines the land activity. Section III discusses the results and what was learned vis-à-vis food security.

I. The Alatona Irrigation Project

The fundamental idea behind the Alatona Irrigation Project was as follows: By providing poor farmers with high-value irrigated land, proper incentives, key inputs, and training, they can produce substantially more food and income than had been possible before and thus escape the cycle of poverty. The project would also catalyze general economic development in the region around the project zone. Moreover, the project would help the region's people increase their food self-sufficiency, which in turn would reduce their risk of suffering from food shortages associated with instability, and would make more food available to Mali's people as a whole.

The project required effort in a variety of disciplines in order to achieve its objectives and was organized into six activities:

- *Irrigation infrastructure development*: Under this activity, 4,940 hectares of irrigated land were developed. This was a heavy-construction exercise consisting of canal dredging, land clearing and laying out new irrigated land parcels;

- *Road upgrade:* The project planned to upgrade the road between the towns of Niono and Goma Coura to improve farm-to-market access and general transportation. The project area is along this road. The upgrade was not completed as originally planned, but access from the project area to Niono was improved;

- *Resettlement*: Each household displaced or affected by the irrigation infrastructure development received new housing, a full range of social benefits, and two hectares of irrigated land as compensation for their loss of access to land[1];

- *Agricultural services*: This activity helped farmers improve their farming and business skills and work together in farmers' associations. In addition, farmers received seeds and other supplies to help them begin cultivating the land they received through the project;

- *Financial services*: This activity improved the capacity of local financial institutions and farmers to make loans, repay loans and manage their financial resources; and

- *Land allocation*: Through this activity (i) new irrigated land parcels were surveyed, (ii) five-hectare farms were allocated in ownership to 954 beneficiary households, (iii) land recipients were educated about their rights and obligations, (iv) the local land registration system was upgraded, and (v) revenue from the sale of land was collected for future community needs (66 percent of the land was sold to project beneficiaries).

II. Key Land Activity Design Features and their Relationship to Food Security

During development of the land activity, a number of key design decisions had to be made, such as farm size, type of land rights to award, payment for land, who would receive land rights, and regulations on use of the irrigated land. This section presents three land activity design features with a bearing on the food security issue.

Opposite: Farmers harvest rice in Alatona.

1 The project divided the irrigated land it developed into five-hectare farms. The resettled households received two hectares free of charge as compensation for resettlement, and purchased the remaining three hectares on an installment basis.

What type of right should farmers receive to land?

Farmers who have more secure rights to land tend to be more productive because they capture more of the benefits of their hard work and investment. Secure tenure tends to enhance food security. By improving farmer productivity, more food becomes available and more growth-causing economic activity takes place. Moreover, secure tenure helps farmers reduce the risk of a loss of land rights in a politically unstable setting.

Generally speaking, ownership represents the highest form of land rights security, though leasing, usufruct and customary rights can provide security as well. The relative importance of various types of land rights depends on the country context. In the case of the Alatona Irrigation Project, the choice was between leasing and owning.

The Alatona Irrigation Project area is located adjacent to a large administrative zone of villages, irrigation canals and roughly 90,000 hectares of irrigated land (Office du Niger 2013). This zone is called the *Office du Niger* (*ON*) and is controlled by a para-statal agency of the same name. The *ON* went through a period of reform in the 1980s and 1990s that improved the land tenure environment by granting usufruct rights and one-year renewable leases to farmers (Aw and Diemer 2005). Despite these improvements, during project development farmers continued to complain about the heavy-handed manner in which their land rights were managed by the *ON*. For example, the *ON* frequently cancelled farmers' leases even for short delays in making the required payments. In addition, selling of land was not permitted, and a black market in land had developed.

Given the continuing concerns about *ON* interference with farmers' rights, plus the potential for boosting productivity and general economic growth by allowing land to be sold, MCC and the Government of Mali decided that the irrigated land developed under the project would be transferred in ownership to the beneficiary farmers. Private ownership reduced the risk of *ON* interference.[2] Mali's former president, Amadou Toumani Touré, personally supported the ownership approach, and its groundbreaking and innovative nature was consistent with MCC's search for far-reaching, potentially game-changing investments.

The project successfully issued land titles for the 954 farms, plus additional land titles for women's market gardens. Since each farm consisted of either two or three parcels, the project processed and issued 2,900 titles in total. These titles represent the first significant formal ownership of rural land in the country.

An important complement to allocating land in ownership was revising the *cahier des charges*. This was a land use regulatory document that set out the rights and responsibilities of land users. Historically, the *cahier des charges* used in the *ON* imposed tight constraints on how farmers could use their irrigated land. The project's revised *cahier des charges*, by contrast, was a strong affirmative statement on the rights of a landowner. Most notably, the *cahier* specifically gave farmers the right to sell or lease their land and gave them increased freedom to plant different crops rather than being obligated to grow only rice.

2 In 2008, the project land area was transferred from the administrative control of the *ON* to the control of the prime minister's office, making it more difficult for the *ON* to assert control over the land. The *ON* controls the main canals supplying water to the project area, thus good relations between the project farmers and the *ON* remain essential.

How could the project make land available to women?

In general, women do not have strong rights in the traditional rural society of the Alatona area. The head of a household, who is almost always the husband, typically exercises predominant control over most of the household's assets. However, given the growing body of evidence that significant development benefits flow to women, and to the family unit, when women have increased control over assets, MCC was keenly interested in ensuring both women and men would receive rights to the irrigated land developed by the project.

One of the ways that the project tried to make land available to women was through joint titling, that is, by registering ownership of the allocated land to the husband as well as his wife. Joint titling was presented to the family members, who then made the decision whether to jointly title the land or not. Joint titling was voluntary; it was not required.

The project implementers presented the joint titling option in the following manner in order to assure informed decision-making.

- The model land transfer contracts and the *cahier des charges* were translated into the local languages.

- Separate educational meetings were held with the women and men of a village simultaneously. This separation was deemed essential for the women to actively participate. At the meetings, identical information was presented about benefits of joint titling, so that the women and men were hearing the same thing. The contracts and *cahier des charges* were also presented line by line.

Beneficiaries of the Alatona Irrigation Project gather in the village of Feto.

- The information was presented over a four to six day period, with two to three hours of instruction per day. This schedule gave the women time to care for their children, thus making their participation possible.

Implementation of joint titling was a great success. About 34 percent of the beneficiaries decided to title their farmland in the names of the husband and wife, a figure that far exceeded project expectations of 10 to 20 percent.[3] Both parties signed the land transfer contract, and both parties were registered as owners at the local property registration office.

How should the land be allocated?

The Alatona Irrigation Project developed 954 farms. Out of this number, 801 farms had to be provided to project-affected households through the resettlement process. The remaining 153 farms were available for distribution to others. What criteria should be used to select the recipients of these 153 farms? This was a major project design question, and a number of factors were considered in developing a solution:

- The project wanted qualified farmers to receive the 153 farms to maximize the chances of agricultural success;

- The project wanted farmers with limited or no direct access to land to have a good chance to receive a farm; and

- The project wanted the farm allocation process to be fair to all applicants and to minimize the possibility of people gaining control over farms through corrupt action.

After considering these factors, the project designers developed a two-stage process for picking the recipients of the 153 farms: a minimum qualifications test and a public lottery.

The minimum qualifications test required applicants for land to complete a form with the following information:

- Access to land: Applicants with little or no access to land could receive up to 20 points on their applications;

- Farming experience: Applicants with experience in irrigated agriculture could receive up to 30 points on their applications, depending upon the number of years of experience;

- Farming education: Applicants with some farming education could receive 5 points on their applications;

- Proof of water fee payment: Applicants who could prove they had paid water fees in the past could receive 5 points on their applications. Since farmers would be required to pay for land and water under the project, past evidence of making payments was important;

3 Forty percent of the households who received land through the resettlement process selected joint titling for the husband and wife. By contrast, almost none of the farmers who received land through the minimum qualifications and lottery process selected joint titling. The poor results for the latter farmers were due to the fact that they had applied for land as individuals, thus felt entitled to take sole possession of the land, and because the project's outreach effort on joint titling was derailed by the Malian military's overthrow of the country's democratic government in March of 2012.

- Collaboration: Applicants who had participated in an association or cooperative in the past could receive 10 points on their applications. This was important because the farmers would have to work together to manage the irrigation infrastructure;

- Resources: Applicants who had basic farming equipment and draft animals, equivalent cash or proof of access to credit could receive 20 points on their applications; and

- Women and youth: Applicants who were women or men under 40 years of age could receive 10 points on their applications as a way to increase their participation while still respecting the other qualifications.

These attributes were graded on a 100-point scale, and 60 points were needed for an applicant to pass the minimum qualifications test and be eligible to participate in the lottery. The grades were not used to pick the farm recipients directly because there was a limit to the accuracy of these criteria as predictors of performance. Does a farmer with five years of experience always perform better than a farmer with four?

The second step in the process was a public lottery through which the farm recipients would be selected. A lottery was used for two reasons. First, a lottery is very transparent: It is conducted in a public forum where tampering with the results is difficult, which makes the outcome more likely to be accepted by the population. Second, due to the random selection that a lottery provides, control and treatment groups can be established, and they can be used to carry out valid evaluations of the project's impact.

The president of the women's association of the village of Beldenadji holds the association's market garden land title.

The project advertised the opportunity to participate in the lottery throughout the *Office du Niger*, and established "depots" in five different towns where 7,561 people submitted applications. From this total, the project rejected 3,114 applications before technical evaluation for a number of reasons, such as failure to supply required information or the applicant was not a Malian citizen. The project then reviewed and scored the remaining 4,447 applications, and 3,391 people had the minimum attributes required to participate in the lottery.

Lottery day was March 6, 2012, in the town of Niono. At a public ceremony the recipients of the 154 farms were selected through a random drawing. Women received 24 of these farms. By all accounts the lottery was properly conducted, was free from fraud and its results were accepted by both government officials and the general population.

III. Conclusion

The land activity met most of its targets. All of the land was distributed to the targeted beneficiaries, all of the beneficiaries received their land titles and the large amount of public outreach work contributed to public acceptance of the project and its accomplishments. The farmers have been making their land payments thus far, have begun to express a sense of ownership over their land and have dramatically increased their income compared to their previous work as dry land farmers and animal herders.

Rice is traditionally processed close to farmers' fields in Alatona.

On the question of food security, though, the land activity's impact cannot yet be determined conclusively. While near-term food access issues have been resolved for project beneficiaries and those nearby, the theories about stronger land rights – that they will lead to higher productivity, more investment and general economic growth – are not yet proven one way or the other. Ultimate proof of success will come several years in the future when agricultural yields and household incomes in the Alatona project area can be compared to those elsewhere.

Finally, on a more practical level, the process of implementing the land activity offers several lessons that should be considered in future project design and execution. These include:

- Since land issues often trigger strong emotions and can lead to conflict, land-related activities need to be carried out in a way that will lead to their acceptance by those affected. Fairness and transparency can go a long way in delivering this acceptance. In the Alatona project, the combined use of minimum qualifications and the public lottery to award farms met this test.

- Outreach work with affected parties is crucial to project success and sustainability. Joint titling was successful primarily because of the extensive outreach work, as was the allocation of ownership rights to land.

- Rights of women can be improved in traditional societies if approached in the correct manner. Again, the outreach work with women and men during the process of signing land transfer contracts led to the very strong joint titling results. **KIN**

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References

Aw, Djibril and Geert Diemer. 2005. Making a Large Irrigation Scheme Work: A Case Study from Mali. Washington, DC: World Bank. openknowledge.worldbank.org/handle/10986/7320.

Office du Niger. www.office-du-niger.org. Accessed February 19, 2013.

Rolfes, Leonard. 2005. Mali: Land Tenure Due Diligence Final Report. Unpublished document.

U.S. Agency for International Development (USAID). 20120. "Mali's Food Security Challenges: An Overview."

World Bank. "PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank," iresearch.worldbank.org/PovcalNet/index.htm. Accessed on February 27, 2013.